AMENDMENT TO CLAIMS:

Claims 1-26 (canceled)

- 27. (new) A pharmaceutical composition comprising a therapeutically effective amount of a procyanidin.
- 28. (new) The pharmaceutical composition of claim 27, wherein the procyanidin is at least one procyanidin oligomer 2-12.
- 29. (new) The pharmaceutical composition of claim 27, wherein the procyanidin is at least one procyanidin oligomer 2-5.
- 30. (new) The pharmaceutical composition of claim 27, wherein the procyanidin is at least one procyanidin oligomer 4-12.
- 31. (new) The pharmaceutical composition of claim 27, wherein the procyanidin is B-2 procyanidin.
- 32. (new) The pharmaceutical composition of claim 27, wherein the procyanidin is B-5 procyanidin.
- 33. (new) The pharmaceutical composition of claim 27, wherein the procyanidin has the following formula:

- 34. (new) The pharmaceutical composition of claim 27, adapted for administration by injection.
- 35. (new) The pharmaceutical composition of claim 34, wherein the procyanidin is at least one procyanidin oligomer 2-12.

- 36. (new) The pharmaceutical composition of claim 34, wherein the procyanidin is at least one procyanidin oligomer 2-5.
- 37. (new) The pharmaceutical composition of claim 34, wherein the procyanidin is at least one procyanidin oligomer 4-12.
- 38. (new) The pharmaceutical composition of claim 34, wherein the procyanidin is B-2 procyanidin.
- 39. (new) The pharmaceutical composition of claim 34, wherein procyanidin is B-5 procyanidin.
- 40. (new) The pharmaceutical composition of claim 34, wherein the procyanidin has the following formula:

- 41. (new) The pharmaceutical composition of claim 27, adapted for nasal administration.
- 42. (new) The pharmaceutical composition of claim 41, wherein the procyanidin is at least one procyanidin oligomer 2-12.
- 43. (new) The pharmaceutical composition of claim 41, wherein the procyanidin is at least one procyanidin oligomer 2-5.
- 44. (new) The pharmaceutical composition of claim 41, wherein the procyanidin is at least one procyanidin oligomer 4-12.
- 45. (new) The pharmaceutical composition of claim 41, wherein the procyanidin is B-2 procyanidin.

- 46. (new) The pharmaceutical composition of claim 41, wherein procyanidin is B-5 procyanidin.
- 47. (new) The pharmaceutical composition of claim 41, wherein the procyanidin has the following formula:

- 48. (new) The pharmaceutical composition of claim 27, adapted for rectal administration.
- 49. (new) The pharmaceutical composition of claim 48 wherein the procyanidin is at least one procyanidin oligomer 2-12.
- 50. (new) The pharmaceutical composition of claim 48 wherein the procyanidin is at least one procyanidin oligomer 2-5.
- 51. (new) The pharmaceutical composition of claim 48 wherein the procyanidin is at least one procyanidin oligomer 4-12.
- 52. (new) The pharmaceutical composition of claim 48 wherein the procyanidin is B-2 procyanidin.
- 53. (new) The pharmaceutical composition of claim 48 wherein procyanidin is B-5 procyanidin.
- 54. (new) The pharmaceutical composition of claim 48 wherein the procyanidin has the following formula:

- 55. (new) The pharmaceutical composition of claim 27, adapted for vaginal administration.
- 56. (new) The pharmaceutical composition of claim 55, wherein the procyanidin is at least one procyanidin oligomer 2-12.
- 57. (new) The pharmaceutical composition of claim 55, wherein the procyanidin is at least one procyanidin oligomer 2-5.
- 58. (new) The pharmaceutical composition of claim 55, wherein the procyanidin is at least one procyanidin oligomer 4-12.
- 59. (new) The pharmaceutical composition of claim 55, wherein the procyanidin is B-2 procyanidin.
- 60. (new) The pharmaceutical composition of claim 55, wherein procyanidin is B-5 procyanidin.
- 61. (new) The pharmaceutical composition of claim 55, wherein the procyanidin has the following formula:

- 62. (new) The pharmaceutical composition of claim 1, further comprising an additional anti-tumor, anti-cancer and/or anti-neoplastic agent.
- 63. (new) The pharmaceutical composition of claim 34, further comprising an additional anti-tumor, anti-cancer and/or anti-neoplastic agent.
- 64. (new) The pharmaceutical composition of claim 41, further comprising an additional anti-tumor, anti-cancer and/or anti-neoplastic agent.
- 65. (new) The pharmaceutical composition of claim 48, further comprising an additional anti-tumor, anti-cancer and/or anti-neoplastic agent.
- 66. (new) The pharmaceutical composition of claim 55, further comprising an additional anti-tumor, anti-cancer and/or anti-neoplastic agent.